

REMARKS

After entry of this amendment, claims 1, 4-12, 14-15, 18-21, and 32-35 are pending. In the present Office Action, claims 22, 24-25, and 27-31 were rejected under 35 U.S.C. § 102(e) as being anticipated by Xu et al., U.S. Patent No. 6,324,581 ("Xu"). Claims 1-21 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Xu in view of what would have been obvious to one of skill in the art. Claims 23 and 26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Xu in view of Gregg et al., U.S. Patent No. 6,442,613. Applicants respectfully traverse these rejections and request reconsideration.

Claims 1, 4-12, 14-15, 18-21, and 32-35

Applicants respectfully submit that each of claims 1, 4-12, 14-15, 18-21, and 32-35 recite combinations of features not taught or suggested in Xu. For example, claim 1 recites a combination of features including "said metadata server is further configured to provide a device identifier identifying said storage on an interconnect to which at least said computing node and said storage are coupled; wherein said computing node is coupled to receive said first file identifier and said device identifier for directly accessing said storage on said interconnect". Xu does not teach or suggest the above highlighted combination of features.

Xu teaches a variety of systems having clients, data movers, and a cached disk array (see Xu, Figs. 1-4). In Fig. 1, Xu teaches a system in which "The cached disk array 25 is configured so that the file system 23 is accessible only through the data port connected to the first data mover 21 and so that the file system 24 is accessible only through the data port connected to second data mover 22" (Xu, col. 2, lines 9-13). In Fig. 2, Xu teaches a system similar to Fig. 1 but which also "includes a data bypass path 48 between the first data mover 41 and the second file system 44 in order to bypass the second data mover 42, and a data bypass path 49 between the second data mover 42 and the first file system 43 in order to bypass the first data mover 41" (Xu, col. 8, lines 37-41). However, communication with clients in Fig. 2 is the same as in Fig. 1 (that is,

client communication occurs between the data movers and the clients and the data movers communicate with the cache disk array on behalf of the clients). The systems of Figs. 1 and 2 in Xu do not teach or suggest at least "said computing node is coupled to receive said first file identifier and said device identifier for directly accessing said storage on said interconnect" as recited in claim 1.

In Fig. 3, Xu's system includes "Each client 64, 65 also has a respective bypass data path 66, 67 that bypasses the data mover 61 for reading data from and writing data to the file system 62" (Xu, col. 10, lines 2-5). Xu's system of Fig. 4 is a combination of the systems of Figs. 1-3, which some clients having bypass paths to various cached disk arrays and other clients not having bypass paths. In Fig. 4, either a client has a dedicated, direct bypass path for accessing a cached disk array or the client accesses the cached disk array through the data movers. There is no teaching or suggestion to sue a device identifier on the dedicated, direct bypass paths in Xu. None of Xu's system's teach or suggest "said metadata server is further configured to provide a device identifier identifying said storage on an interconnect to which at least said computing node and said storage are coupled; wherein said computing node is coupled to receive said first file identifier and said device identifier for directly accessing said storage on said interconnect".

The present Office Action alleges that Xu teaches a device identifier at col. 4, lines 5-7: "[The second data mover] returns to the first data mover computer metadata of the file including information specifying data storage locations in data storage for storing data of the file." Applicants respectfully disagree. The cited section of Xu discusses returning information identifying locations in the data storage that store data for the file, not "a device identifier identifying said storage on an interconnect". Furthermore, the Office Action cites Xu col. 4, lines 1-60. However, Applicants can find nothing in the cited section that teaches or suggests the above highlighted features of claim 1.

For at least the above stated reasons, Applicants submit that claim 1 is patentable over the cited art. Claims 4-12, 14, and 32-33 depend from claim 1 and thus are

patentable over the cited art for at least the above stated reasons as well. Each of claims 4-12, 14, and 32-33 recite additional combinations of features not taught or suggested in the cited art.

Claim 15 recites a combination of features including "providing a device identifier identifying said storage on an interconnect to which at least said computing node and said storage are coupled, the providing responsive to said request; and directly accessing said storage from said computing node on said interconnect responsive to said first file identifier and said device identifier". The teachings of Xu, highlighted above, do not teach or suggest the combination of features recited in claim 15, either. Accordingly, Applicants submit that claim 15 is patentable over the cited art. Claims 18-21 and 34-35, being dependent from claim 15, are similarly patentable over the cited art for at least the above stated reasons. Each of claims 18-21 and 34-35 recite additional combinations of features not taught or suggested in the cited art.

CONCLUSION

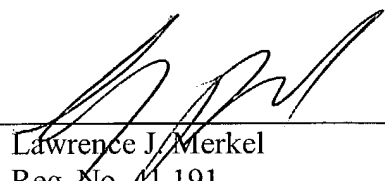
Applicants submit that the application is in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5181-59700/LJM.

Also enclosed herewith are the following items:

- ☒ Return Receipt Postcard
- ☐ Petition for Extension of Time
- ☐ Request for Approval of Drawing Changes
- ☐ Notice of Change of Address
- ☐ Fee Authorization Form authorizing a deposit account debit in the amount of \$
for fees ().
- ☐ Other:

Respectfully submitted,



Lawrence J. Merkel
Reg. No. 41,191
AGENT FOR APPLICANT(S)

Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C.
P.O. Box 398
Austin, TX 78767-0398
Phone: (512) 853-8800

Date: 7/2/04